CURT DARON STORLAZZI

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EDUCATION:

2000 Ph.D. University of California at Santa Cruz, Santa Cruz, CA

Earth Sciences Department, Concentrations: Coastal Geology and Oceanography

1996 B.Sc. University of Delaware, Newark, DE

Geology Department, Concentrations: Geomorphology and Sedimentology

RESEARCH EXPERIENCE:

2002-present Research Geologist and Oceanographer

Coastal and Marine Geology Program, US Geological Survey

2002-present Research Associate

Institute for Marine Sciences, University of California at Santa Cruz

2002-2004 Research Fellow

Partnership for Interdisciplinary Studies of Coastal Oceans Consortium

2000-2002 Post-doctoral Researcher

Institute for Marine Sciences, University of California at Santa Cruz

1996-2000 Graduate Student Researcher

Earth Sciences Department, University of California at Santa Cruz

RESEARCH INTERESTS:

- Coral reef and rocky shoreface morphology, hydrodynamics, sediment distribution and the resulting modes of sediment transport
- The influence of coastal hydrodynamics on nearshore rock and reef biologic communities
- The interplay between geologic structure, climatic fluctuations and coastal processes
- The influence of extreme storm events on the geomorphic evolution of coastlines
- High-resolution oceanographic instrumentation and coastal mapping techniques

SPECIALTY COURSES:

Storm Processes, American Society of Civil Engineers, 2007

MORPH Sediment Transport Model Application short course, Delft Hydraulics, 2007

FLOW Hydrodynamic Model Application short course, Delft Hydraulics, 2005

Leadership Intensive Course, US Geological Survey, 2004

Water Wave Modeling short course, American Society of Civil Engineers, 2001

SWAN Wave Model Application short course, Delft Hydraulics, 2001

QUALIFICATIONS:

- Master Scuba Diver with Advanced Open-water and Nitrox Certifications (NAUI)
- Scientific/Research Scuba Diver (AAÜS, US-DOI): >450 scientific dives
- Class-A and Class-1 Motorboat Operator Certifications (US-DOI)
- First Aid, CPR-Pro, AED and DAN Oxygen Administration Certifications
- Basic Helicopter/Airplane Safety Certification (US-DOI)

PROFESSIONAL AFFILIATIONS:

- American Geophysical Union (AGU), 1994-present
- Coastal Education and Research Foundation (CERC), 1996-present
- American Shore and Beach Preservation Association (ASBPA), 1999-2002
- American Academy of Underwater Sciences (AAUS), 2000-present
- International Society for Reef Studies (ISRS), 2003-present
- American Society of Limnology and Oceanography (ASLO), 2004-present

JOURNAL AND REPORT REVIEW:

- Nature Geoscience, Journal of Geophysical Research-Oceans, Continental Shelf Research, Coral Reefs, Marine Geology, Sedimentary Geology, Journal of Sedimentary Research, Coastal Estuarine and Shelf Science, Journal of Coastal Research, Marine Ecology Progress Series, Earth Science and Planetary Letters, Climate Research journals (4-6 per year)
- "Gulf of the Farallones and Cordell Bank National Marine Sanctuaries Climate Change Site Scenario" NOAA National Marine Sanctuary Program, 2010
- National Science Foundation, Biological Oceanography Program, 2010
- "Kalaupapa National Historical Park Geologic Resources Inventory Report" NPS Geologic Resources Division, 2010
- "Offshore Geophysical Survey Report Supporting the scwd2 Seawater Desalination Facility", City of Santa Cruz, 2010
- "Environmental Fluid Dynamics Codes (EFDC) Model Development and Application for Hanalei Bay, Hawaii", US Environmental Protection Agency (EPA) and State of Hawaii Department of Health, 2010
- National Science Foundation, Biological Oceanography Program, 2009
- "Secretary's 2009 Report on a Comprehensive Offshore Energy Program", US Department of the Interior, 2009
- National Science Foundation, Geomorphology and Land Use Dynamics Program, 2009
- "Coastal Hazard Analysis for Pu'ukohola Heiau National Historic Site and Koloko-Honokohau Historical Park, Big Island, Hawai'i", National Park Service, 2008
- "Environmental Assessment of the Highway 1 Slide Area at Pitkins Curve, Monterey County", California Department of Transportation and the Monterey Bay National Marine Sanctuary (MBNMS), 2008
- "US Army Corps of Engineers' Design for Enhancement of Wave-Induced Circulation at Kaunakakai Harbor, Molokai, Hawaii", State of Hawaii Office of Planning, 2008
- "Final Environmental Impact Statement for the Monterey Bay National Marine Sanctuary's' Joint Management Plan", MBNMS, 2008
- National Science Foundation, Geomorphology and Land Use Dynamics Program, 2008
- "US Army Corps of Engineers Regional Sediment Management Offshore Canyon Capture", MBNMS, 2008
- National Science Foundation, Physical Oceanography Program, 2007
- "Kona Kai Ola Project Draft Environmental Impact Statement", Kaloko-Honokohau National Historical Park, US National Park Service, 2007.
- "Fall 2005 Inner Santa Cruz Harbor Dredge Disposal Monitoring Program", MBNMS, 2006
- "Hydrodynamics and Sediment Dynamics in Elkhorn Slough", MBNMS, 2005
- "Hawaii's Local Action Strategy to Address Land-based Pollution Threats to Coral Reefs", US Coral Reef Task Force, 2004
- Coastal Storms Initiative, Pacific Northwest Pilot Project's "Oregon Coastal Inundation Tool" real-time storm and inundation model, NOAA's Coastal Services Center, 2004
- "A Sediment Trend Analysis (STA) of Santa Cruz and its Vicinity: Implications to Dredge Disposal Operations", MBNMS, 2000
- Seawall engineering proposal, City of Pacific Grove, CA, 2000

SCIENTIFIC REVIEW PANELS:

- US Coral Reef Task Force (USGS/EPA/NOAA/others), Hawaii's Local Action Strategy to Reduce Land-based Pollution Threats to Coral Reefs, 2004-present
- NOAA, Monterey Bay National Marine Sanctuary, coastal geology representative (primary) to the Research Activities Panel, 2005-present
- State of California, Pescadero Lagoon Working Group, 2007–present
- City of Santa Cruz, Seawater Desalination Plant Technical Working Group, 2009-present
- US Army Corps of Engineers and NOAA Workshop on Climate Change and Variability in the Pacific, representing climate change impacts to coral reefs, 2010
- NOAA Marine Protected Area (MPS) and Integrated Ocean Observing System (IOOS) Task Team, 2010
- US Geological Survey Western Coastal and Marine Geology Team Habitats and Ecosystem Studies Assessment (chair), 2010
- State of California and Monterey Bay National Marine Sanctuary, Central California Halibut Trawl Fishery Working Group, 2010
- US Geological Survey, National Climate Change and Wildlife Science Center Proposals, 2010
- NOAA, Monterey Bay National Marine Sanctuary 2009 Condition Report, 2009
- US Geological Survey, National Climate Change and Wildlife Science Center Proposals, 2009
- US Geological Survey, Eastern Region Coral Reef Science 5-year Project Review, 2009
- State of California Department of Transportation, Scott and Waddell Creek Bridge Replacement/Lagoon Restoration Working Group, 2007–2009
- US Geological Survey, Pacific Southwest Area Integrated Science Workshop on Climate Change, Coastal and Marine Geology Team representative, 2008
- California Department of Boating and Waterways and Santa Cruz County Redevelopment Agency, Pleasure Point Geologic and Oceanographic Processes Technical Working Group, 2005-2008
- US National Park Service and Commonwealth of the Northern Marianas Island's Coastal Resources Management Office, Coastal erosion at American Memorial Park, Saipan, CNMI, 2007
- NOAA, Joint Management Plan for the Cordell Bank, Gulf of the Farallones, and Monterey Bay National Marine Sanctuaries, 2006-2007
- NOAA, Undersea Research Program, Undersea Research on Tropical and Subtropical Marine Ecosystems, 2005
- NOAA, Monterey Bay National Marine Sanctuary, coastal geology representative (alternate) to the Research Activities Panel, 2004-2005
- Hawaiian Department of Natural Resources/Hawaiian Department of Aquatic Resources/University of Hawaii, Hawaii Coral Reef Initiative Research Program, 2004
- Natural Environment Research Council, Physical Oceanography Programme (U.K.), 2004
- National Parks Service, Pacific Islands Coral Reef Program, 2003
- US Geological Survey, Bureau-wide Coral Reef Science 10-year Planning Meeting, 2002
- NOAA, Monterey Bay National Marine Sanctuary 5-year Planning Committee, 2000

MEETINGS OR WORKSHOPS CHAIRED:

- 15th International Ocean Sciences Meeting, Synergistic Interactions Between Stressors to Coral Reefs Session, 2010 (chair)
- 15th International Ocean Sciences Meeting, Physical Processes on Coral Reefs and Their Role in Reef Dynamics Session, 2010 (co-chair)
- 15th International Ocean Sciences Meeting, Geomorphic Process and Modeling of Rocky and Bluffed Coasts Session, 2010 (co-chair)
- Monterey Bay National Marine Sanctuary's Research Activities Panel Spring Meeting, 2010 (chair)
- 11th International Coral Reef Symposium, Hydrodynamics of Coral-Reef Systems Session,

2008 (co-chair)

- Monterey Bay National Marine Sanctuary's Research Activities Panel Fall Meeting, 2008 (chair)
- 1st Monterey Bay Research Consortium's Central California Environmental Modeling Workshop, 2007 (co-chair)
- 6th International Symposium on Coastal Sediments, Seafloor Mapping Session, 2007 (co-chair)
- 13th International Ocean Sciences Meeting, Environmental Change and Its Impact on Coral Reefs Session, 2006 (chair)
- Monterey Bay National Marine Sanctuary's Research Activities Panel Fall Meeting, 2006 (chair)
- 10th International Coral Reef Symposium, The Influence of Storms and Floods on Coral Reef Development Session, 2004 (co-chair)
- 11th Pacific Congress on Marine Science and Technology, Hydrodynamics of Coastal Waters Session, 2001 (co-chair)

HONORS AND AWARDS:

- USGS SIM 3007 ("Views of the Seafloor in Northern Monterey Bay, California") selected by the USGS to represent USGS science at the 2010 ESRI International User Conference, 07/2010
- USGS SIR 2007-5101 ("The Coral Reef of South Moloka'i, Hawai'i—Portrait of a Sediment Threatened Fringing Reef") sent by the USGS Office of Communications and USGS Director Suzette Kimball to 33 State Senators and Representative that make up the Senate Committees on the (1) Energy and Environment, and (2) Water, Land, Agriculture, and Hawaiian Affairs, and the House Committees on (3) Energy and Environmental Protection, and (4) Water, Land, and Ocean Resources, 08/2009
- USGS SIR 2007-5101 ("The Coral Reef of South Moloka'i, Hawai'i—Portrait of a Sediment Threatened Fringing Reef") selected as Association of Earth Science Editors' Outstanding Publication of 2009 (print category), 07/2009
- USGS SIR 2007-5101 ("The Coral Reef of South Moloka'i, Hawai'i—Portrait of a Sediment Threatened Fringing Reef") awarded the National Association of Government Communicator's Blue Pencil Award of Excellence for 2009 (technical communication), 04/2009
- USGS SIM 3007 ("Views of the Seafloor in Northern Monterey Bay, California") nominated for Shoemaker Communications Award, 04/2009
- USGS SIR 2007-5101 ("The Coral Reef of South Moloka'i, Hawai'i—Portrait of a Sediment Threatened Fringing Reef") nominated for Shoemaker Communications Award, 04/2009
- USGS SIR 2007-5101 honored by Hawaii State Senate and House of Representatives as Concurrent Resolution #2009-0916 SCR SMA-1, 03/2009
- "Reversing Coral Reef Decline in Hawai`i -- A New Look at a Critical Problem" describing the release of USGS SIR 2007-5101 featured on the USGS Homepage (http://www.usgs.gov/), 11/2008
- USGS Star Award, for service, leadership, and team citizenship, 2008
- War-in-the-Pacific NHP joint USGS-NPS research program highlighted by USGS Director Myers in Sea Technology (January 2008 issue, pg. 31), 2008
- USGS Star Award, for service, leadership, and team citizenship, 2007
- USGS Star Award, for outstanding performance of scientific duties, 2006
- USGS Star Award, for service, leadership, and team citizenship, 2006
- "Coral Reefs and Sea-Level Rise Don't Mix" presentation designated a USGS "Science Pick" of the month in March by the USGS National Center's Communication Office, 2006
- Pleasure Point Project noted as a Ocean Research highlight by Sea Technology (September 2006 issue, pg. 61), 2006
- USGS Star Award for developing partnerships with the State of California and Santa Cruz County, 2005
- USGS Star Award for service as USGS Pacific Science Center's Building Safety Officer,

- USGS Star Award for RGE Panel service, 2004
- West Maui Coastal Circulation Experiment noted as a news highlight by the Marine Pollution Bulletin (vol. 46, pg. 931), 2003
- West Maui Coastal Circulation Experiment designated a USGS "Science Pick" of the month in July and August by the USGS National Center's Communication Office, 2003
- "USGS Help Monitor the *USS Arizona* Memorial" highlighted in the April issue of *People, Land and Water*, the news magazine of the US Department of the Interior, 2003
- American Geological Institute's "Highlight of the Year Issue" designation in Solid Earth (Geomorphology) Section for Storlazzi and Griggs (2000) GSA Bulletin paper, 2000
- David and Lucile Packard Foundation Postdoctoral Research Fellowship, 2000-2001
- Graduate Assistance in Areas of National Needs Fellowship, 1999
- Tuition Fellowship, University of California, Santa Cruz, 1996
- Regents' Fellowship, University of California, Santa Cruz, 1996
- National Collegiate Natural Science Award, 1994, 1995

EXTERNAL FUNDING:

- 2010-2011: NOAA, Hawaiian Coral Reef Initiative Research Program. "Impact of land-derived sediment on the coral reef ecosystem of Pelekane Bay, Hawaii" \$148,900 (Co-principal Investigator)
- 2010-2011: US National Park Service, Kalaupapa National Historical Park. "Hydrography of Kalaupapa National Historical Park's (KALA) coastal waters" \$33,400 (Principal Investigator)
- 2009-2010: US Army Corps of Engineers' Engineer Research and Development Center. "Study of the Fate of Mixed Grained Sediment Dredged from the Santa Cruz Harbor" \$130,000 (Principal Investigator)
- 2008: David and Lucile Packard Science and Technology Endowment. "Assessing the impacts of fire from watersheds to the nearshore ocean" \$15,000 (Co-principal Investigator)
- 2007-2008: US National Park Service, War in the Pacific National Historical Park. "Circulation and sediment dynamics in War in the Pacific National Historical Park's (WAPA) coastal waters" \$78,900 (Principal Investigator)
- 2005-2007: California Department of Boating and Waterways and Santa Cruz County Redevelopment Agency. "Pleasure Point Geologic and Oceanographic Processes Study" \$155,100 (Principal Investigator)
- 2005-2007: US National Park Service, Water Resources Division. "Determining subterranean groundwater nutrient input to Kaloko-Honokohau National Historical Park's (KAHO) coastal ocean ecosystem" \$98,600 (Co-principal Investigator)
- 2004-2005: US National Park Service, Pacific Islands Coral Reef Program. "Coastal circulation and water column properties at Kaloko-Honokohau National Historical Park (KAHO)" \$98,700 (Co-principal Investigator)
- 2002-2005: US National Park Service, Submerged Cultural Resources Center. "Dynamics of the physical environment at the USS Arizona Memorial (USAR)" \$28,900 (Co-principal Investigator)

FIELD EXPERIENCE:

http://walrus.wr.usgs.gov/infobank/programs/html/scientists2idshtml/s/curt_storlazzi_ids.html

INVITED TALKS:

- "Nearshore disposal of fine-grained sediment in a high-energy environment" California and the World's Ocean 2010 Conference, 09/2010
- "Climate change impacts to US coral reefs." US Army Corps of Engineers and NOAA-Pacific Climate Information System Programs, 07/2010
- "Circulation and sediment dynamics in Maunalua Bay, Oahu." The Nature Conservancy, Hawaii Marine Program, 06/2010
- "USGS's investigations of terrestrial impacts to and marine processes in northern Monterey Bay." Monterey Bay National Marine Sanctuary's Research Activities Panel Meeting, 03/2010
- "Development of and Land-Based Threats to Coral Reefs" University of California at Santa Cruz, Biology Department, 02/2010
- "Observations and Modeling of Habitat Stability on the Central California Continental Shelf." California State University, Moss Landing Marine Laboratory, 02/2010
- "Seabed Instability." University of California at Santa Cruz, Earth Sciences Department, 10/2009
- "Observations and Modeling of the Spatial and Temporal Scales of Sediment Mobility on the Continental Shelf." NOAA Southwest Fisheries Science Center, 06/2009
- "Land-based Threats to Coral Reefs." Cabrillo College, Natural and Applied Science Division, 05/2009
- "Observations and Modeling of the Spatial and Temporal Scales of Sediment Mobility on the Continental Shelf." NOAA Center for Coastal Fisheries and Habitat Research, 04/2009
- "Geologic and Oceanographic Processes that Control the Formation of Bar-built Estuaries." California Regional Water Quality Control Board science staff, 04/2009
- "USGS efforts to understand circulation and sediment dynamics in Maunalua Bay, Oahu" US Coral Reef Task Force, Hawaiian Local Action Strategy, 03/2009
- "An Overview of the Coastal and Marine Geology Program's Coral Reef Project and Its Current Research in Maunalua Bay, Oahu." USGS Pacific Islands Water Science Center, 02/2009
- "The Influence of Climate Change on Coastal Processes and Benthic Habitats: Past Observations, Present Modeling, and Future Projections." US Fish and Wildlife Service and US Geological Survey's "Climate Change, Natural Resources, and Coastal Management Workshop", 01/2009
- "Geologic and Oceanographic Processes that Control the Formation of Bar-built Estuaries." Pescadero Marsh Restoration Forum, 12/2008
- "USGS's Brown-2-Blue studies: Investigating terrestrial impacts on northern Monterey Bay's coastal waters." Monterey Bay National Marine Sanctuary's Research Activities Panel Meeting,

11/2008

- Presented USGS Coral Reef Project results to USGS Associate Director Suzette Kimball, 07/2008
- "Possible Issues with Mining Sediment from Submarine Canyons for Beach Restoration", Monterey Bay National Marine Sanctuary's Research Activities Panel Meeting, 05/2008
- "Geologic and Oceanographic Processes at Pleasure Point, California." California Coastal Commission, 06/2007
- "Coastal Erosion Processes Along Central California." Davenport Geological Society, 06/2007
- "El Niño-Southern Oscillation (ENSO) Events and Coastal Erosion Processes Along Central California." California State University, Moss Landing Marine Laboratory, 02/2006
- "The Role of Active Processes in Habitat Studies." National Marine Fisheries Service-University of California at Santa Cruz-US Geological Survey's "Fisheries Science Coordination Meeting", 07/2005
- "Variability in Oceanographic and Meteorologic Forcing along Central California and its Implications on Nearshore Processes." University of California at Santa Cruz, Institute of Marine Sciences, 11/2004
- "Variability in Oceanographic and Meteorologic Forcing along Central California and its Implications on Nearshore Physical and Biologic Processes." National Marine Fisheries Service, Pacific Fisheries Environmental Laboratory, 05/2004
- "Life and Death of Hawaiian Coral Reefs." U.S. Geological Survey's Western Region Public Lecture Series, 02/2004
- "The Influence of Physical Processes on Coral Reefs: Insights from West Maui, Hawaii." University of California at Santa Cruz, Earth Sciences Department, 11/2003
- Presented USGS Coral Reef Project results to USGS Director Charles Groat, 10/2003
- "Sediment Dynamics on Hawaiian Reefs: Insights from Southern Molokai, Hawaii." Stanford University, Department of Geological and Environmental Sciences, 03/2003
- "Application of Mapping to Sediment Dynamics Studies and Habitat Analysis on Rocky Inner Shelves." U.S. Geological Survey, Western Region Coastal and Marine Geology Team, 07/2002
- "Sediment Dynamics on Hawaiian Reefs: Insights from Southern Molokai, Hawaii." U.S. Geological Survey, Western Region Coastal and Marine Geology Team, 06/2002
- "Wave Control on Coral Distribution and Fringing Reef Morphology: Southern Molokai, Hawaii." University of Delaware, Institute of Marine Sciences and Department of Geology, 05/2002
- "Wave Control on Coral Distribution and Fringing Reef Morphology: Southern Molokai, Hawaii." University of California at Santa Cruz, Institute of Marine Sciences, 05/2002

- "Cool Tools in Physical Oceanography" University of California's Seymour Marine Discovery Center, 04/2002
- "Long-term High-frequency ADCP and Temperature Measurements Along Central California: Insights into Upwelling and Internal Waves on the Inner Shelf." University of California at Santa Cruz, Institute of Marine Sciences, 11/2001
- "Coastal Hazards and Processes along the Monterey Peninsula and Carmel Bay, CA" Carmel, CA, city council and land use planners, 04/2001
- "El Niño-Southern Oscillation (ENSO) Events and Coastal Erosion Processes along Central California." American Geophysical Union 2000 Fall Meeting, Ocean Sciences Section, Special Session OS-22: Linking Climate Variability and Coastal Processes, 12/2000

PUBLICATIONS:

Storlazzi, C.D., Elias, E., Field, M.E., and Presto, M.K., in review. "Numerical modeling of the impact of sea-level rise on fringing coral reef hydrodynamics and sediment transport" *Coral Reefs*

Storlazzi, C.D., Field, M.E., and Bothner, M.H., in review. "The use (and misuse) of sediment traps in coral reef environments: Theory, observations, and suggested protocols" *Coral Reefs*

Storlazzi, C.D., Field, M.E., Elias, E., and Presto, M.K., in review. "The influence of sea-level rise on fringing reef sediment dynamics: Field observations and numerical modeling" *Coastal Sediments 2011 Conference Proceedings*

Hoeke, R.K., Storlazzi, C.D., and Ridd, P.V., in review. "Hydrodynamics of a bathymetrically complex fringing coral reef embayment: wave climate, in situ observations and wave prediction" *Journal of Geophysical Research - Oceans*

Storlazzi, C.D., and Reid, J.A., 2010. "The influence of El Niño-Southern Oscillation (ENSO) cycles on wave-driven sea-floor sediment mobility along central California continental margin." *Continental Shelf Research*, v. 30, p. 1582-1599.

Storlazzi, C.D., Field, M.E., Bothner, M.H., Presto M.K., and Draut, A.E., 2009. "Controls on sediment dynamics in a coral reef embayment: Hanalei Bay, Kauai" *Marine Geology*, v. 264, p. 140-151.

Peery, M.Z., Newman, S.H., Storlazzi, C.D., and Beissinger, S.R., 2009. "Meeting reproductive demands in a dynamic upwelling system: foraging strategies of a pursuit-diving seabird, the Marbled Murrelet" *The Condor*, v. 111(1), p. 120-134.

Draut, A.E., Bothner, M.H., Reynolds, R.L., Field, M.E., Cochran, S.A., Logan, J.B., Storlazzi, C.D., and Berg, C.J., 2009. "Supply and dispersal of seasonal flood deposits in Hanalei Bay, Kaua'i, HI, USA: Implications for coral-reef ecosystems" *Geological Society of America Bulletin*, v. 121(3-4), p. 574-585.

Revell, D.L., Barnard, P.L., Mustain, N., and Storlazzi, C.D., 2008. "The influence of harbor construction on downcoast beach morphologic evolution: Santa Barbara, CA" *ASCE Solutions to Coastal Disasters 2008 Conference Proceedings*, p. 630-642.

- Storlazzi, C.D. and Jaffe, B.E., 2008. "The relative contribution of processes driving variability in flow, shear, and turbidity over a fringing coral reef: West Maui, Hawaii" *Estuarine Coastal and Shelf Science*, v. 77(4), p. 549-564.
- Piniak, G.A. and Storlazzi, C.D., 2008. "Diurnal variability in turbidity and coral fluorescence on a fringing reef flat: Southern Molokai, Hawaii" *Estuarine Coastal and Shelf Science*, v. 77(1), p. 56-64.
- Wingfield, D.K. and Storlazzi, C.D., 2007. "Variability in oceanographic and meteorologic forcing along Central California and its implications on nearshore processes" *Journal of Marine Systems*, v. 68, p. 457-472.
- Phillips, E.L., Storlazzi, C.D., Dartnell, P. and Edwards, B.D., 2007. "Exploring rippled scour depressions offshore Huntington Beach, CA" *ASCE Coastal Sediments 2007 Meeting Proceedings*, v. 3, p. 1851-1864.
- Vitousek, S., Fletcher, C.H., Merrifield, M.A., Pawlak, G., Storlazzi, C.D., 2007. "Model scenarios of shoreline change at Kaanapali Beach, Maui, Hawaii: Seasonal and extreme events" *ASCE Coastal Sediments 2007 Meeting Proceedings*, v. 2, p. 1227-1240.
- Storlazzi, C.D., McManus, M.A., Logan, J.B., and McLaughlin, B.E., 2006. "Cross-shore velocity shear, eddies, and heterogeneity in water column properties over fringing coral reefs: West Maui, Hawaii" *Continental Shelf Research*, v. 26, p. 401-421.
- Storlazzi, C.D., Brown, E.K., and Field, M.E., 2006. "The application of acoustic Doppler current profilers to measure the timing and patterns of coral larval dispersal" *Coral Reefs*, v. 25, p. 369-381.
- Bothner, M.H., Reynolds, R.L., Casso, M.A., Storlazzi, C.D. and Field, M.E., 2006. "Quantity, composition and source of sediment collected in sediment traps along the fringing coral reef off Molokai, Hawaii" *Marine Pollution Bulletin*, v. 52(9), p. 1034-1047.
- Presto, M.K., Ogston, A.O., Storlazzi, C.D., Field, M.E., 2006. "Temporal and spatial variability in the flow and dispersal of suspended-sediment on a fringing reef flat, Molokai, Hawaii" *Estuarine Coastal and Shelf Science*, v. 67, p. 67-81.
- Storlazzi, C.D., Brown, E., Field, M.E., Rogers, K., and Jokiel, P.L., 2005. "A model for wave control on coral breakage and species distribution in the Hawaiian Islands" *Coral Reefs*, v. 24, p. 43-55.
- Adams, P.N., Storlazzi, C.D., and Anderson, R.S., 2005. "Nearshore wave-induced cyclical flexing of seacliffs" *Journal of Geophysical Research-Earth Surface*, v. 110, F02002, DOI:10.1029/2004JF000217.
- McManus, M.A., Cheriton, O.M., Drake, P.J., Holliday, D.V., Storlazzi, C.D., Greenlaw, C.E., and Donaghay, P.L., 2005. "Thin layers and the transport and retention of marine plankton in coastal systems" *Marine Ecology Progress Series*, v. 301, p. 199-215.
- Drake, P., McManus, M.A., and Storlazzi, C.D., 2005. "Local wind forcing of the Monterey Bay area inner shelf" *Continental Shelf Research*, v. 25, p. 397-417.

- Storlazzi, C.D., Ogston, A.S., Bothner, M.H., Field, M.E., and Presto M.K., 2004. "Wave- and tidally-driven flow and sediment flux across a fringing coral reef: South-central Molokai, Hawaii" *Continental Shelf Research*, v. 24(12), p. 1397-1419.
- Ogston, A.S., Storlazzi, C.D., Field, M.E. and Presto, M.K., 2004. "Currents and suspended sediment transport on a shallow reef flat: South-central Molokai, Hawaii" *Coral Reefs*, v. 23, p. 559-569.
- Engels, M.S., Fletcher, C.H., Field, M.E., Storlazzi, C.D., Grossman, E.E., Rooney, J.B., Conger, C.L., and Glenn, C., 2004. "Holocene reef accretion: southwest Molokai, Hawaii" *Journal of Sedimentary Research*, v. 74(2), p. 255-269.
- Storlazzi, C.D., Logan, J.B., and Field, M.E., 2003. "Quantitative morphology of a fringing reef tract from high-resolution laser bathymetry: Southern Molokai, Hawaii" *Geological Society of America Bulletin*, v. 115, no. 11, p. 1344–1355.
- Storlazzi, C.D., McManus, M.A., and Figurski, J.D., 2003. "Long-term high-frequency ADCP and temperature measurements along central California: Insights into upwelling and internal waves on the inner shelf" *Continental Shelf Research*, v. 23, p. 901-918.
- Storlazzi, C.D., Field, M.E., Dykes, J.D., Jokiel, P.L., and Brown, E., 2002. "Wave Control on Reef Morphology and Coral Distribution: Molokai, Hawaii" *WAVES 2001 Conference Proceedings*, American Society of Civil Engineers, San Francisco, California, v. 1, p. 784-793.
- Storlazzi, C.D., and Jaffe, B.E., 2002. "Flow and sediment suspension events on the inner shelf of central California" *Marine Geology*, v. 181, p. 195-213.
- Storlazzi, C.D. and Field, M.E., 2000. "Sediment distribution and transport along a rocky, embayed coast: Monterey Peninsula and Carmel Bay, California" *Marine Geology*, v. 170, no. 3-4, p. 289-316.
- Storlazzi, C.D. and Griggs, G.B., 2000. "The influence of El Niño-Southern Oscillation (ENSO) events on the evolution of central California's shoreline" *Geological Society of America Bulletin*, v. 112, no. 2, p. 236-249.
- Storlazzi, C.D., Willis, C.M., and Griggs, G.B., 2000. "Comparative impacts of the 1982-83 and 1997-98 El Niño winters on the central California coast" *Journal of Coastal Research*, v. 17, no. 4, p. 1022-1036.
- Storlazzi, C.D., 2000. "Hydrodynamics, sediment transport and El Niño-induced seacliff erosion along the coastline of central California" Ph.D. Thesis, University of California at Santa Cruz. 137+ p.
- Benumof, B.T., Storlazzi, C.D., Seymour, R.J., and Griggs, G.B., 2000. "The relationship between incident wave energy and seacliff erosion rates: San Diego County, California" *Journal of Coastal Research*, v. 17, no. 4, p. 1162-1178.
- Field, M.E., Storlazzi, C.D., Calhoun, R.S., and Cochran, S.A., 2000. "Sedimentation patterns on the fringing reef off southern Moloka'i, Hawai'i" *Proceedings of the National Beach Preservation Conference 2000*, American Shore and Beach Preservation Association, August 2000, Kaanapali, Maui, Hawai'i, p. 67-69.
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POSTDOCTORAL SCIENTISTS ADVISED:

Li H. Erikson, USGS Postdoctoral Scientist, 2009-2011, "Arctic Bluff Retreat and Inundation of an Ecologically Sensitive Barrier Island System Due to a Changing Global Climate" Funded by the USGS Mendenhall Program

Christopher H. Conaway, USGS Postdoctoral Scientist, 2008-2010, "Fluvial Deposition in the Coastal Ocean and its Impact on Nearshore Ecosystems" Funded by the USGS Mendenhall Program

GRADUATE STUDENT RESEARCH SUPPORT:

E. Lynne Harden, UCSC, "Predicting Potential Impacts of Sea-Level Rise on Sandy Beaches in California."

Ronald Hoeke, James Cook University (AU), "Wave-driven circulation in a coral reef embayment"

Sean Vitousek, University of Hawaii (UH), "Model scenarios of shoreline change at Kaanapali Beach, Maui, Hawaii: Seasonal and extreme events."

Stacy Jupiter, UCSC, "Coral trace element records of terrestrial, agricultural and land-use change in a Great Barrier Reef catchment."

Guy Marion, University of Queensland (AU), "Coral trace element records of historic terrestrial land use in Mackay Whitsunday, central Great Barrier reef"

Peter Adams, UCSC, "Nearshore wave-induced cyclical flexing of seacliffs."

Kathy Presto, University of Washington, "Temporal and spatial variability in the flow and dispersal of suspended-sediment on a fringing reef flat, Molokai, Hawaii."

Mary Engels, UH, "Holocene reef accretion: southwest Molokai, Hawaii."

Johanna Rosman, Stanford University, "Field observations of the flow field in and around Giant Kelp (*Macrocystsis pyrifera*) forests."

Olivia Cheriton, UCSC, "Physical and biological controls on the maintenance and dissipation of a thin phytoplankton layer."